Yasunaga et al. S/N: 10/711,890

REMARKS

Claims 1, 2, 6-10, 12-14, 16, 19 and 20 are pending in the present application. In the Final Office Action mailed August 31, 2006, the Examiner rejected claims 1, 2, 6-8, 12-14, 16, and 19 under 35 U.S.C. §102(e) as being anticipated by Igarashi (USP 6,587,538) "Igarashi."

Claim 20 was allowed and claims 9 and 10 were indicated as containing allowable subject matter. Such indication is appreciated.

The Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Igarashi et al. Applicant respectfully seeks reconsideration. Claim 1 calls for, in part, at least one indexing pin connected to the scintillator module, and a collimator assembly having a plurality of collimator elements and a plurality of teeth configured to define a relative position of the plurality of collimator elements and a portion thereof configured to engage the at least one indexing pin, and wherein at least two of the plurality of teeth are constructed to flank an indexing pin.

As shown in Figs. 8A and 9A, Igarashi describes a detector unit 240 that includes a module base 241, and four detector packs 242a-242d disposed in a file in the module base 241. A positioning pin 243 projects from the module base 241. Igarashi, Col. 8, Ins. 35-39, Fig. 8A. Notched grooves 221b and 222b are respectively formed in supports 221 and 222. Id., Col. 7, lns. 54-55 and Fig. 9A. Teeth at a spacing "P" are formed in supports 221 and 222 between grooves 221a and 222a, and position plates 223 in collimator module 220. Id., Fig. 9B. Positioning pin 243 positions collimator module 220 by the use of grooves 222b, Id., Figs. 8A and 9A. Detector unit 240 is positioned on end supports 211 and 212, by positioning pin 211a, Fig. 8A, into locating hole 241a, and by positioning pin 212a into locating hole 241b. Id., Figs. 8A and 9A. Igarashi fails to teach a plurality of teeth to define a relative position of a plurality of collimator elements and a portion thereof (of the teeth) to engage at least one indexing pin, wherein at least two of the plurality of teeth are constructed to flank an indexing pin. The teeth of Igarashi serve to position collimator plates 223, while the location of the detector unit 240 with respect to the overall assembly is accomplished by placing pins 211a and 212a into holes 241a and 241b, respectively. Furthermore, the location of the collimator module 220 is accomplished by positioning slots 222b into pins 243.

The Examiner alleged that teeth 221a, 222a are "configured to define a relative position of the plurality of collimator elements and a portion thereof 222b configured to engage the at least one indexing pin." *Office Action, Pg. 2.* Applicant respectfully disagrees because the "teeth" of Igarashi formed by grooves 221a and 222b do not serve to engage either indexing pins 211a or 243. Thus, Igarashi discloses a module alignment wherein the pin engages a notch and wherein

Yasunaga et al. S/N: 10/711,890

the notch is separate from the collimator elements. The pin of Igarashi does <u>not</u> engage with the collimator elements themselves, as does the pin specifically claimed by Applicant.

Accordingly, that which is called for in claim 1 is not disclosed or suggested in the art of record. As such, Applicant believes claim 1, and the claims which depend therefrom, are patentably distinct over the art of record.

Claim 8 calls for, in part, a scintillator-collimator combination comprising a comb having a plurality of teeth constructed to align the plurality of collimator elements and constructed to engage the scintillator module and align the scintillator module relative to the plurality of collimator elements. Igarashi fails to teach or suggest that which is called for in claim 8. The Examiner alleged that comb 220 has "a plurality of teeth 221a, 222a constructed to align the plurality of collimator elements and the comb is constructed to engage the scintillator module relative to the plurality of collimator elements." *Office Action, Pg. 3.* However, the plurality of teeth 221a, 222a serve to position plates 223. Element 220 is not a "comb." Element 220 is a collimator module. The structure that may be designated as a "comb" could either be element 221a or element 222a (Fig. 9B), neither of which serve to "engage the scintillator module and align the scintillator module relative to the plurality of collimator elements." The "teeth" of Igarashi fail to engage the scintillator module and fail to align the scintillator module relative to the plurality of collimator elements.

Accordingly, that which is called for in claim 8 is not disclosed or suggested in the art of record. As such, Applicant believes claim 8, and the claims which depend therefrom, are patentably distinct over the art of record.

Claim 14 calls for, in part, a CT system comprising a collimator assembly having a plurality of collimator plates, and a detector support having at least one comb of alignment teeth, the alignment teeth constructed to align the plurality of collimator plates, and constructed to engage an indexing pin to align a scintillator array with the plurality of collimator plates. As stated above, the teeth of Igarashi 221a, 222a serve to position plates 223. The "teeth" of Igarashi do not align the collimator plates and engage an indexing pin to align a scintillator array with the collimator plates.

Accordingly, that which is called for in claim 14 is not disclosed or suggested in the art of record. As such, Applicant believes claim 14, and the claims which depend therefrom, are patentably distinct over the art of record.

Yasunaga et al. S/N: 10/711,890

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1, 2, 6-10, 12-14, 16, 19 and 20.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

/Timothy J. Ziolkowski/

Timothy J. Ziolkowski Registration No. 38,368 Direct Dial 262-376-5139 tjz@zpspatents.com

Dated: October 31, 2006

Attorney Docket No.: GEMS8081.199

P.O. ADDRESS:

Ziolkowski Patent Solutions Group, SC 14135 North Cedarburg Road Mequon, WI 53097-1416 262-376-5170